REMARKS

On entry of this response, claims 1, 14, 23, 33 and 37 have been amended. Support for the amendment can be found through the present application. No new matter has been introduced. Now pending in the application are claims 1-48, of which 1, 14, 23 and 33 are independent.

I. Rejection of Claims 1-31 and 33-48

Claims 1-31 and 33-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,374,117 ("Denkert") in view of U.S. Patent No. 5,982,760 ("Chen"). See the Office Action, page 2.

A. Claim 1

Applicants submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest "*if it is checked and there is no mobile station making use of the packet data service where the current call is in progress, gradually increasing power transmitted to the mobile station making use of the packet data service, wherein the increased power is in a remaining power other than a power allocated to the line service*," as recited in claim 1.

Claim 1 relates to a power allocation method for providing a packet data service with a line service in a mobile communication system. The power allocation method recited in claim 1 is capable of reducing the line outage service while simultaneously providing **the line service and the packet data service** in the same frequency allocation. See the present application, page 3, lines 14-18.

For example, when the packet data traffic is generated, the power allocation method recited in claim 1 may allocate the power, which remains after power is allocated to the line service, to the Mobile Station (MS) that newly makes use of the packet data service. The power allocation method allocates the remaining power in a **gradually** increasing amount, as required by claim 1.

Applicants submit that the cited references do not disclose or suggest a power allocation method for allocating power between two communication services, for example, the data packet service and the line service. The cited references disclose, at best, a power allocation method for a single communication service, i.e., one of data packet service and line service.

Denkert discloses a method for controlling a transmit power level based upon queue delay for packets **in a wireless packet data system.** (See Denkert, Abstract). Denkert also discloses determining whether or not to prioritize data packets through increased transmit power based upon, for example, a subscriber's QoS profile. (See Denkert, Abstract).

Denkert, however, does not disclose or suggest a power allocation method for allocating power between the data packet service and the line service. Denkert does not disclose or suggest "*gradually increasing power transmitted to the mobile station making use of the packet data service, wherein the increased power is in a remaining power other than a power allocated to the line service*," as required by claim 1.

Chen discloses a method for providing power control **in a closed-loop communication system**. (See Chen, Abstract). Chen discloses that a base station monitors the quality of a feedback link between the base station and a mobile station and changes the operation mode from a fast power control feedback mode to a slow power control feedback mode. (See Chen, Abstract).

Chen, however, does not disclose or suggest a power allocation method for adjusting power between the data packet service and the line service. Denkert does not disclose or suggest "*gradually increasing power transmitted to the mobile station making use of the packet data service, wherein the increased power is in a remaining power other than a power allocated to the line service*," as required by claim 1.

For the reasons set forth above, Applicants respectfully submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest all of the limitations of claim 1. Therefore, Applicants request that the Examiner reconsider and withdraw the rejection of claim 1 under 35 U.S.C. §103(a).

B. Claims 2-13

Claims 2-13 depend from claim 1 and, as such, incorporate the subject matter of claim 1. For the reasons set forth above in connection with claim 1, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 2-13 under 35 U.S.C. §103(a).

C. Claim 14

Applicants submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest "if it is checked and there is no mobile station making use of the packet data service where the current call is in progress, gradually increasing power transmitted to the mobile station making use of the packet data service by a same preset power magnitude at each preset period of time for a preset predetermined time, wherein the increasing power is in a remaining power other than a power allocated to the line service," as recited in claim 14.

As discussed above, the cited references do not disclose or suggest a power allocation method for adjusting the power between the data packet service and the line service. The cited references do not disclose or suggest gradually increasing power transmitted to the mobile station making use of the packet data service, wherein the increased power is in a remaining power other than a power allocated to the line service, as required by claim 14.

For the reasons set forth above, Applicants respectfully submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest all of the limitations of claim 14. Therefore, Applicants request that the Examiner reconsider and withdraw the rejection of claim 14 under 35 U.S.C. §103(a).

D. Claims 15-22

Claims 15-22 depend from claim 14 and, as such, incorporate the subject matter of claim 14. For the reasons set forth above in connection with claim 14, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 15-22 under 35 U.S.C. §103(a).

E. Claim 23

Applicants submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest "if it is checked and there is no mobile station making use of the packet data service where the current call is in progress, controlling power transmitted to the mobile station making use of the packet data service to be gradually increased at each preset period of time for a preset predetermined time in a way that an increasing width of each step is gradually decreased as the period of time proceeds, wherein the gradually increased power is in a remaining power other than a power allocated to the line service," as recited in claim 23.

As discussed above, the cited references do not disclose or suggest a power allocation method for allocating power between the data packet service and the line service. The cited references do not disclose or suggest that the power transmitted to the mobile station that makes use of the packet data service is gradually increased, wherein the increased power is in a remaining power other than a power allocated to the line service, as required by claim 23.

For the reasons set forth above, Applicants respectfully submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest all of the limitations of claim 23. Therefore, Applicants request that the Examiner reconsider and withdraw the rejection of claim 23 under 35 U.S.C. §103(a).

F. Claims 24-32

Claims 24-32 depend from claim 23 and, as such, incorporate the subject matter of claim 23. For the reasons set forth above in connection with claim 23, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 24-32 under 35 U.S.C. §103(a).

G. Claim 33

Applicants submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest "a control section for checking whether or not there is the mobile station making use of the packet data service, and according to the checked result, controlling the power section to gradually regulate the power transmitted to the mobile station making use of

the packet data service, wherein the gradually regulated power is in a remaining power other than a power allocated to the line service," as recited in claim 33.

Claim 33 relates to a power allocation apparatus for providing a packet data service with a line service in a mobile communication system. The power allocation apparatus recited in claim 33 is capable of reducing the line outage service while simultaneously providing **the line service and the packet data service** in the same frequency allocation. For example, when the packet data traffic is generated, the power allocation apparatus recited in claim 33 may allocate the power, which remains after power is allocated to the line service, to the mobile station that makes use of the packet data service. The power allocation apparatus allocates the remaining power in a **gradually** increasing amount, as required by claim 33.

Applicants submit that the cited references do not disclose or suggest a power allocation apparatus that allocates power between two communication services, for example, the data packet service and the line service. The cited references disclose, at best, a power allocation apparatus for a single communication service, i.e., one of the data packet service and the line service. Denkert and Chen do not disclose or suggest a power allocation apparatus that allocates power between the data packet service and the line service. Denkert and Chen do not disclose or suggest "a control section for ... controlling the power section to gradually regulate the power transmitted to the mobile station making use of the packet data service, wherein the gradually regulated power is in a remaining power other than a power allocated to the line service," as recited in claim 33.

For the reasons set forth above, Applicants respectfully submit that Denkert and Chen, alone or in any reasonable combination, do not disclose or suggest all of the limitations of claim 33. Therefore, Applicants request that the Examiner reconsider and withdraw the rejection of claim 33 under 35 U.S.C. §103(a).

H. Claims 34-48

Claims 34-48 depend from claim 33 and, as such, incorporate the subject matter of claim 33. For the reasons set forth above in connection with claim 33, Applicants respectfully request

that the Examiner reconsider and withdraw the rejection of claims 34-48 under 35 U.S.C. §103(a).

II. Rejection of Claim 32

Claim 32 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Denkert in view of Chen and U.S. Patent No. 7,209,724 ("Richards"). See Office Action, page 22.

Claim 32 depends from claim 23 and, as such, incorporates the subject matter of claim 23. Applicants submit that Denkert, Chen and Richards, alone or in any reasonable combination, do not disclose or suggest "if it is checked and there is no mobile station making use of the packet data service where the current call is in progress, controlling power transmitted to the mobile station making use of the packet data service to be gradually increased at each preset period of time for a preset predetermined time in a way that an increasing width of each step is gradually decreased as the period of time proceeds, wherein the gradually increased power is in a remaining power other than a power allocated to the line service," as recited in claim 23.

As discussed above, Denkert and Chen do not disclose or suggest this feature.

Richards discloses a method for power control **in an ultra wideband impulse radio system**. (See Richards, Abstract). Richards discloses controlling output power between two transceivers according to the performance measurement. (See Richards, Abstract).

Richards, however, does not disclose a power allocation method for adjusting power between the data packet service and the line service. Richards does not disclose or suggest that the power transmitted to the mobile station that makes use of the packet data service is gradually increased, wherein the increased power is in a remaining power other than a power allocated to the line service, as required by claim 23.

For the reasons set forth above, Applicants respectfully submit that Denkert, Chen and Richards, alone or in any reasonable combination, do not disclose or suggest all of the limitations of claim 23. Claim 32, which depends from claim 23, is not rendered obvious over

the cited references. Therefore, Applicants request that the Examiner reconsider and withdraw the rejection of claim 32 under 35 U.S.C. §103(a).

III. Conclusion

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Dated: January 30, 2008

Respectfully submitted,

Electronic signature: /EuiHoon Lee/
EuiHoon Lee
Registration No.: L0248
LAHIVE & COCKFIELD, LLP
One Post Office Square
Boston, Massachusetts 02109-2127
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant